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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,135	12/09/2005	Katrin Klass	281746US0PCT	1355

22850 7590 12/19/2008

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EXAMINER	
MANOHARAN, VIRGINIA	
ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
12/19/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/560,135	KLASS ET AL.	
	Examiner	Art Unit	
	Virginia Manoharan	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5,10-13 and 15* is/are allowed.

6)☒ Claim(s) *1-4 ,7 and 14* is/are rejected.

7)☒ Claim(s) *6,8 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-109952 with or without Tanaka et al (3, 878,058).

The above references are applied for the same combined reasons as set forth at the paragraph bridging pages 4 and 5 of the previous Office Action

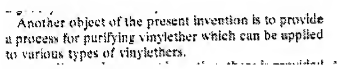
Claims 6 and 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5,10-13 and 15 are allowed.

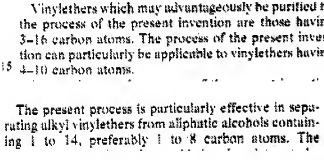
Applicants' arguments filed September 26, 2008 have been fully considered but they are not persuasive.

Applicants' arguments such as : "JP 10-109952 describes a method for separating cyclohexyl vinyl ether from cyclohexanol. These materials are C6 radical molecules and are cyclic in structure. In contrast, the claimed invention is directed to the separation of alcohols and vinyl ethers which are C2 - C4 radical molecules" are not persuasive of patentability because of the following reasons: JP' 952 ether/alcohol with C6 radical molecules is an homologue and/or same family, or same origin with the C2-C4 radical molecules of the claimed invention. It is known in the art or is documented

that "when two compounds show deviations from Raoult's Law, then one of these compounds shows the same type of deviation with any member of the homologous series of the other component". Nonetheless, the argued claimed material is not unobvious nor is it indicative of criticality as taught by Tanaka. At col. 1, lines 36-38,Tanaka's discloses used of vinylethers (not limited) to same process.


Another object of the present invention is to provide a process for purifying vinylether which can be applied to various types of vinylethers.

Tanaka also discloses at col. 2, lines 11-15 and 34-36, materials that appear to encompass or cover the JP'952 materials.


Vinylethers which may advantageously be purified by the process of the present invention are those having 3–16 carbon atoms. The process of the present invention can particularly be applicable to vinylethers having 4–10 carbon atoms.

The present process is particularly effective in separating alkyl vinylethers from aliphatic alcohols containing 1 to 14, preferably 1 to 8 carbon atoms. The

Applicants further argument that the materials according to the claimed invention are not separable by simple distillation is not understood. It is deemed that applicants contemplate doing what the prior art is doing. Like the JP '952 process, the distilland is subjected to a first distillation process; an azeotrope formed from the first distillation column is passed into a second distillation process; and the azeotrope from the second distillation column is recirculated or recyled into the first distillation column. Moreover, and contrary to applicants' assertions, Tanaka mentioned distillation as a viable method for separating mixtures which are "hardly separable by mere rectification treatment due to the azeotrope or the close boiling point." Tanaka's extractive distillation

is a distillation process employed for materials not separable by mere distillation or rectification. As an artisan knows, extractive distillation is similar in purpose to azeotropic distillation.That is, to a mixture which is difficult or impossible to separate by simple distillation or mere rectification, a third component is added which would change the relative volatility of the original constituents in the mixture to allow separation of the constituents from each other. Furthermore, JP' 952 process with wide range of pressures, i.e., the inner pressure of the first distillation tower being 5-100 mmHg and the inner pressure of the second distillation tower being 50-760 mmHg would at least be suggestive or cover the argued second distillation column being operated at a pressure which is from 0.01 to 3 MPa higher compared to the first distillation column as in the claimed invention.

Absolute predictability is not a prerequisite for obviousness rejection All that is required to show obviousness is that the applicant make his claimed invention merely by applying, knowledge clearly present in the prior art. Section 103 requires us to presume full knowledge by the inventor of the prior art in the filed of his endeavor. See In re Winslow, 53 CCPA 1574, 1578, 365 F.2d 1017, 1020, 151 USPQ 48, 50-51 (1966). No commercial success is claimed, nor is any other factor indicating No commercial success is claimed, nor is any other factor indicating non-obviousness is seen to exists.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Coulson et al suggests that "use may be made of the fact that, when two compounds show deviations from Raoult's Law, then one of these compounds shows the same type of deviation with any member of the homologous series of the other component".

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Virginia Manoharan/
Primary Examiner, Art Unit 1797